

Abstract

The invention relates to a sol-gel coating material, containing (A) an
5 acrylate copolymer solution, consisting of at least one acrylate copolymer
(A1), (B) a sol which can be produced by the hydrolysis, condensation and
complexing of at least one hydrolysable metal compound (B1) of the
dormula (1): MR_n ; wherein the variable and the index have the following
meanings: M = aluminium, titanium or zirconium; R = hydrolysable group,
10 hydroxy groups and non-hydrolysable groups, with the proviso that there
should be at least one, preferable two hydrolysable groups; and $n = 3$ or 4 ;
by the hydrolysis, condensation and complexing of at least one
hydrolysable silane (B2) of the formula (II): $Si(R^1)_2(R^2)_2$; wherein the variable
 R^1 and R^2 have the following meanings: R^1 = alkyl and/or cycloalkyl
15 radicals and R^2 = alkoxy and/or cycloalkoxy radicals; and by the hydrolysis,
condensation and complexing of at least one hydrolysable silane (B3) of
the formula (III): SiR_4 ; wherein the variable R has the aforementioned given
meaning: with the proviso that the silane (B3) is not a silane (B2) according
to the general formula (II); and (C) between 0 and 40% by weight in
20 relation to the total quantity of the coating material, of a parent lacquer
which can be produced by the hydrolysis and condensation of least one
hydrolysable silane (B3) of general formula (III).

10069188.022402